

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) Apparatus, comprising:

a set of electrodes, adapted to be implanted at an implantation site in a patient selected from the group consisting of: a stomach of the patient, and an intestinal site of the patient; and

a control unit, adapted to;

drive, even in the absence of a detection of eating by the patient, a first subset of the set of electrodes to apply a first signal to the site configured to reduce a blood glucose level of the patient, and [[to]]

drive, responsive to a detection of eating by the patient, a second subset of the set of electrodes to apply to the site a second signal, different from the first signal, to the site configured to treat obesity of the patient.

2. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein the control unit is adapted to configure the first signal applied by the first subset to comprise an ETC signal.

3. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein the control unit is adapted to configure the second signal applied by the second subset to comprise an ETC signal.

4. (ORIGINAL) The apparatus according to claim 1, wherein the first subset and the second subset comprise at least one electrode in common.

5. (ORIGINAL) The apparatus according to claim 1, wherein the first subset and the second subset are identical.

6. (ORIGINAL) The apparatus according to claim 1, wherein the first subset and the second subset have no electrodes in common.

7. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein the implantation site includes the [[a]] stomach of the patient, and wherein the set of electrodes are adapted to be fixed to the stomach.

8. (CURRENTLY AMENDED) The apparatus according to claim 7 [[1]], wherein the implantation site includes an antrum of the [[a]] stomach of the patient, and wherein the set of electrodes are adapted to be fixed to the antrum.

9. (CANCELLED)

10. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein the implantation site includes the [[an]] intestinal site of the patient, and wherein the set of electrodes are adapted to be fixed to the intestinal site.

11-12. (CANCELLED)

13. (CURRENTLY AMENDED) The apparatus according to claim 8 [[1]], wherein the implantation site includes an antrum of a stomach of the patient, and wherein the set of electrodes comprises at least two pairs of electrodes, adapted to be fixed to the antrum.

14. (ORIGINAL) The apparatus according to claim 13, wherein the set of electrodes comprises at least four pairs of electrodes, adapted to be fixed to the antrum.

15. (ORIGINAL) The apparatus according to claim 13, wherein one of the pairs is adapted to be fixed to a posterior portion of the antrum, and wherein another one of the pairs is adapted to be fixed to an anterior portion of the antrum.

16. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein the at least two pairs of electrodes are adapted to be fixed to the antrum in a longitudinal orientation with respect to an a curved long axis of the stomach.

17. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein the at least two pairs of electrodes are adapted to be fixed to the antrum in a perpendicular orientation with respect to ~~an~~ a curved long axis of the stomach.

18. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein the at least two pairs of electrodes are adapted to be fixed to the antrum in a mixed orientation with respect to ~~an~~ a curved long axis of the stomach.

19. (CURRENTLY AMENDED) The apparatus according to claim 13, wherein the at least two pairs of electrodes comprise a first pair and a second pair of electrodes, adapted to be fixed to the antrum at different respective orientations with respect to ~~an~~ a curved long axis of the stomach, wherein the first pair of electrodes is in the first subset of the set of electrodes, and wherein the second pair of electrodes is in the second subset of the set of electrodes.

20. (CURRENTLY AMENDED) The apparatus according to claim 19, wherein the first pair of electrodes is adapted to be fixed to the antrum in a longitudinal orientation with respect to the curved long axis of the stomach.

21. (CURRENTLY AMENDED) The apparatus according to claim 19, wherein the second pair of electrodes is adapted to be fixed to the antrum in a perpendicular orientation with respect to the curved long axis of the stomach.

22. (CURRENTLY AMENDED) The apparatus according to claim 1,  
Apparatus comprising:

a set of electrodes, adapted to be implanted at an implantation site in a patient selected from the group consisting of: a stomach of the patient, and an intestinal site of the patient; and

wherein the a control unit, [[is]] adapted to;

drive a the first subset of the set of electrodes to apply a first signal to the site configured to reduce a blood glucose level of the patient, with a signal having wherein the first signal has a first frequency component, and [[to]]

drive g the second subset of the set of electrodes to apply to the site a second signal, different from the first signal, configured to treat obesity of the patient, with a signal having wherein the second signal has a second frequency component different from the first frequency component, the first frequency component being smaller than the second frequency component.

23. (CURRENTLY AMENDED) The apparatus according to claim 22, wherein the control unit is adapted to drive the second subset to apply the second signal having the second frequency component without driving the second subset to apply a pacing pulse to the implantation site prior to applying the second signal.

24. (CURRENTLY AMENDED) The apparatus according to claim 22, wherein the first signal having the first frequency component is non-excitatory.

25. (CURRENTLY AMENDED) The apparatus according to claim 22, wherein the second signal having the second frequency component is non-excitatory.

26. (CURRENTLY AMENDED) The apparatus according to claim 22, wherein the control unit is adapted to drive the first subset to alternate application to the implantation site of (a) a pacing pulse and (b) the first signal having the first frequency component.

27. (CANCELLED)

28. (CURRENTLY AMENDED) The apparatus according to claim 26, wherein the control unit is adapted to initiate applying the first signal having the first frequency component within 500 ms following the pacing pulse.

29. (CURRENTLY AMENDED) The apparatus according to claim 28 [[22]], wherein the first frequency component is less than 10 Hz, and wherein the second frequency component is greater than 10 Hz.

30. (ORIGINAL) The apparatus according to claim 29, wherein the second frequency component is between 60 Hz and 100 Hz.

31. (ORIGINAL) The apparatus according to claim 29, wherein the first frequency component is less than half of the second frequency component.

32. (ORIGINAL) The apparatus according to claim 31, wherein the first frequency component is less than one fifth of the second frequency component.

33. (CURRENTLY AMENDED) A method, comprising:

fixing at least two pairs of electrodes to a stomach site of a patient, in a longitudinal orientation with respect to ~~an~~ a curved long axis of the stomach; and  
driving the electrodes to apply a signal to the site configured to treat a pathology of the patient.

34. (CURRENTLY AMENDED) A method, comprising:

fixing at least two pairs of electrodes to a stomach site of a patient, in a perpendicular orientation with respect to ~~an~~ a curved long axis of the stomach; and  
driving the electrodes to apply a signal to the site configured to treat a pathology of the patient.

35. (CURRENTLY AMENDED) A method, comprising:

fixing at least two pairs of electrodes to a stomach site of a patient, in a mixed orientation with respect to ~~an~~ a curved long axis of the stomach; and  
driving the electrodes to apply a signal to the site configured to treat a pathology of the patient.

36. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein the pathology includes diabetes.

37. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein the pathology includes obesity.

38. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein driving the electrodes comprises driving the electrodes even in the absence of a detection of eating by the patient.

39. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein driving the electrodes comprises driving the electrodes responsive to a detection of eating by the patient.

40. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein fixing the at least two pairs of electrodes comprises fixing the at least two pairs of electrodes to an antrum of the stomach of the patient.

41. (ORIGINAL) The method according to claim 40, wherein fixing the at least two pairs of electrodes comprises fixing at least four pairs of electrodes to the antrum.

42. (ORIGINAL) The method according to claim 40, wherein fixing the at least two pairs of electrodes comprises fixing one of the pairs to a posterior portion of the antrum and fixing another one of the pairs to an anterior portion of the antrum.

43. (PREVIOUSLY PRESENTED) The method according to claim 33, wherein driving the electrodes to apply the signal comprises driving the electrodes to apply an ETC signal having a frequency component.

44. (CURRENTLY AMENDED) The method according to claim 43, wherein driving the electrodes to apply the ETC signal comprises driving the electrodes to apply the ETC signal without driving the electrodes to apply a pacing pulse to the implantation site prior to applying the ETC signal.

45. (CURRENTLY AMENDED) The method according to claim 43, comprising driving the electrodes to alternate application to the stomach site of (a) a pacing pulse and (b) the ETC signal.

46. (CANCELLED)

47. (ORIGINAL) The method according to claim 45, comprising initiating applying the ETC signal within 500 ms following the pacing pulse.

48. (ORIGINAL) The method according to claim 43, wherein driving the electrodes comprises setting the frequency component to be less than 10 Hz.

49. (ORIGINAL) The method according to claim 43, wherein driving the electrodes comprises setting the frequency component to be greater than 10 Hz.

50. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein the pathology includes diabetes.

51. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein the pathology includes obesity.

52. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein driving the electrodes comprises driving the electrodes even in the absence of a detection of eating by the patient.

53. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein driving the electrodes comprises driving the electrodes responsive to a detection of eating by the patient.

54. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein fixing the at least two pairs of electrodes comprises fixing the at least two pairs of electrodes to an antrum of the stomach of the patient.

55. (PREVIOUSLY PRESENTED) The method according to claim 54, wherein fixing the at least two pairs of electrodes comprises fixing at least four pairs of electrodes to the antrum.

56. (PREVIOUSLY PRESENTED) The method according to claim 54, wherein fixing the at least two pairs of electrodes comprises fixing one of the pairs to a posterior portion of the antrum and fixing another one of the pairs to an anterior portion of the antrum.

57. (PREVIOUSLY PRESENTED) The method according to claim 34, wherein driving the electrodes to apply the signal comprises driving the electrodes to apply an ETC signal having a frequency component.

58. (CURRENTLY AMENDED) The method according to claim 57, wherein driving the electrodes to apply the ETC signal comprises driving the electrodes to apply the ETC signal without driving the electrodes to apply a pacing pulse to the stomach site prior to applying the ETC signal.

59. (CURRENTLY AMENDED) The method according to claim 57, comprising driving the electrodes to alternate application to the stomach site of (a) a pacing pulse and (b) the ETC signal.

60. (CANCELLED)

61. (PREVIOUSLY PRESENTED) The method according to claim 59, comprising initiating applying the ETC signal within 500 ms following the pacing pulse.

62. (PREVIOUSLY PRESENTED) The method according to claim 57, wherein driving the electrodes comprises setting the frequency component to be less than 10 Hz.

63. (PREVIOUSLY PRESENTED) The method according to claim 57, wherein driving the electrodes comprises setting the frequency component to be greater than 10 Hz.

64. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein the pathology includes diabetes.

65. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein the pathology includes obesity.

66. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein driving the electrodes comprises driving the electrodes even in the absence of a detection of eating by the patient.

67. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein driving the electrodes comprises driving the electrodes responsive to a detection of eating by the patient.

68. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein fixing the at least two pairs of electrodes comprises fixing the at least two pairs of electrodes to an antrum of the stomach of the patient.

69. (PREVIOUSLY PRESENTED) The method according to claim 68, wherein fixing the at least two pairs of electrodes comprises fixing at least four pairs of electrodes to the antrum.

70. (PREVIOUSLY PRESENTED) The method according to claim 68, wherein fixing the at least two pairs of electrodes comprises fixing one of the pairs to a posterior portion of the antrum and fixing another one of the pairs to an anterior portion of the antrum.

71. (PREVIOUSLY PRESENTED) The method according to claim 35, wherein driving the electrodes to apply the signal comprises driving the electrodes to apply an ETC signal having a frequency component.

72. (CURRENTLY AMENDED) The method according to claim 71, wherein driving the electrodes to apply the ETC signal comprises driving the electrodes to apply the ETC signal without driving the electrodes to apply a pacing pulse to the stomach site prior to applying the ETC signal.

73. (CURRENTLY AMENDED) The method according to claim 71, comprising driving the electrodes to alternate application to the stomach site of (a) a pacing pulse and (b) the ETC signal.

74. (CANCELLLED)

75. (PREVIOUSLY PRESENTED) The method according to claim 73, comprising initiating applying the ETC signal within 500 ms following the pacing pulse.

76. (PREVIOUSLY PRESENTED) The method according to claim 71, wherein driving the electrodes comprises setting the frequency component to be less than 10 Hz.

77. (PREVIOUSLY PRESENTED) The method according to claim 71, wherein driving the electrodes comprises setting the frequency component to be greater than 10 Hz.

78. (NEW) The apparatus according to claim 1, wherein the control unit is adapted to drive the first and the second subsets of electrodes at different times.

79. (NEW) The apparatus according to claim 22, wherein the first subset and the second subset comprise at least one electrode in common.

80. (NEW) The apparatus according to claim 22, wherein the first subset and the second subset are identical.

81. (NEW) The apparatus according to claim 22, wherein the first subset and the second subset have no electrodes in common.

82. (NEW) The apparatus according to claim 22, wherein the control unit is adapted to drive the first and the second subsets of electrodes at different times.

83. (NEW) The apparatus according to claim 22, wherein the first frequency component is smaller than the second frequency component.